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APPLICATION NUMBER	FILED DATE	FIRST NAMED APPLICANT	ATTY. DOCKET NO.
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08/894,186 08/14/97 THOMAS

1 IVERSON  
EXAMINER

DETAILED ACTION  
A3M1/0306

ART UNIT PAPER NUMBER  
PRATT 1302 3

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DATE MAILED:

The following communication is the appropriate paragraph of 35 U.S.C. 103/06/98

This is a communication from the examiner in charge of your application.  
COMMISSIONER OF PATENTS AND TRADEMARKS

OFFICE ACTION SUMMARY

- ☐ Responsive to communication(s) filed on \_\_\_\_\_
- ☐ This action is FINAL.
- ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 D.C. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire 3 month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a). Sanitizing agent which can be chlorine dioxide in amounts of about 25 mg. chlorine for 30

Disposition of Claims

- ☒ Claim(s) 1-28 is/are pending in the application.
- Of the above, claim(s) 1-28 is/are withdrawn from consideration.
- ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- ☒ Claim(s) 1-28 is/are rejected.
- ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- ☐ Claim(s) \_\_\_\_\_ is/are subject to restriction or election requirement.

Application Papers

The following is a quotation of 35 U.S.C. 101(a) which defines the term "process":

- ☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.
- ☐ The drawing(s) filed on \_\_\_\_\_ is/are objected to by the Examiner.
- ☐ The proposed drawing correction, filed on \_\_\_\_\_ is ☐ approved ☐ disapproved.
- ☐ The specification is objected to by the Examiner.
- ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

- ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

- ☒ All ☐ Some\* ☐ None of the CERTIFIED copies of the priority documents have been
- ☒ received.
- ☐ received in Application No. (Series Code/Serial Number) \_\_\_\_\_
- ☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\*Certified copies not received: \_\_\_\_\_

- ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

- ☒ Notice of Reference Cited, PTO-892
- ☐ Information Disclosure Statement(s), PTO-1449, Paper No(s) \_\_\_\_\_
- ☐ Interview Summary, PTO-413
- ☐ Notice of Draftsperson's Patent Drawing Review, PTO-948
- ☐ Notice of Informal Patent Application, PTO-152

--SEE OFFICE ACTION ON THE FOLLOWING PAGES--

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## **DETAILED ACTION**

### ***Claim Rejections - 35 U.S.C. § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-4 are rejected under 35 U.S.C. 102(b) as being anticipated by Busta.

Busta discloses a process of treating lettuce and other salad ingredients to reduce microbial contamination by washing in a cleansing solution, rinsing, and then contacting with a sanitizing agent which can be chlorine dioxide in amounts of about 25 ppm chlorine for 30 seconds at 35 C. Col. 3, lines 14-25 and col. 4, lines 66-71. Removing debris is seen to be a function of washing with water.

### ***Claim Rejections - 35 U.S.C. § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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Claims 5-8, 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Busta et al. in view of Dave.

Claims 5-7 further requires that the pH of the chlorine dioxide solution is less than 11. No pH is given for the solution, however, as the amounts of chemicals are within the same range, it is seen that the pH is under the claimed amounts. Also, Dave discloses that it is known to use a particular pH of between 5 and 7 in a chlorine bath (col. 1, lines 60-70). Therefore, it would have been obvious to select a particular pH for a solution, containing known ingredients.

Claim 8 requires that the produce is submerged for 30 seconds. This step is seen as within the skill of the ordinary worker, to submerge the vegetables long enough to lessen the microbial load. Therefore, it would have been obvious to submerge the vegetables long enough in the process of Busta et al. to lessen the microbial load.

Claim 12 further requires using a second water flow of chlorine dioxide to further clean the produce. However, it is seen that it would have been within the skill of the ordinary worker to use as many process waters as necessary to produce a safe product. Therefore, it would have been obvious to use enough washings to produce a safe product.

Claims 9 and 10, 13-15, 18, 19-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Busta (102 rejection) and Busta in view of Dave as applied to claims 5-8, 12 above, and further in view of Mason et al.

Mason et al. disclose a process of generating chlorine dioxide from sodium chlorite and the use of various acids in the process (col. 2, lines 56-64 and col. 6, lines 1-21). Even though

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phosphoric acid is not specifically mentioned, it can provide a pH of below 3.7 and is a mineral acid, as cited in Mason et al. Therefore, it would have been obvious to use a known process of making chlorine dioxide in the claimed process.

The further claims as to adding sodium 2-ethylhexyl sulfate and other detergents as in claims 13, 14, 18, 19, 25 are seen as obvious as the detergents are used for their known functions of cleaning and Busta discloses that it is known to clean vegetables with detergents (col. 2, lines 50-60). The combination of adding detergents plus the chlorine dioxide to reduce microbiological contamination, is seen as combining known processing steps for their known functions.

Therefore, it would have been obvious clean vegetables with detergents.

Claim 15 further requires monitoring the oxidation reduction potential of the process water and generating more chemicals until the contaminants are gone. This is an obvious process steps, which is necessary if the proper microbial level is reached and the pH of the water is maintained. Therefore, it would have been obvious to monitor the water to maintain the proper treatment levels.

The limitations of 16 and 17, 20, 21 have been discussed above and are obvious for those reasons.

Claim 22 further requires providing a monitor to sense the oxidation reduction potential in the process water and to monitor it. However, the limitation of the monitor is an apparatus limitation in a process claim and is not given weight. Checking the chemicals in the water is seen

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to be within the skill of the ordinary worker to determine if they are in the right amounts.

Therefore, it would have been obvious to monitor the amounts of chemicals in the water.

The limitations of claims 23, 24, 26, 27 and 28 have been discussed above and are obvious for those reasons.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Helen Pratt whose telephone number is (703) 308- 1978. The examiner can normally be reached on Monday - Friday from 8:30 to 5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. David Lacey, can be reached on (703) 308-3535. The fax phone number for this Group is (703) 305-3601.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308-0651.

  
Helen Pratt

Primary Examiner  
Art Unit 1302

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